

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)	
)	
Internet Protocol Captioned Telephone Service Compensation)	CG Docket No. 22-408
)	
Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities)	CG Docket No. 03-123
)	
Misuse of Internet Protocol (IP) Captioned Telephone Service)	CG Docket No. 13-24
)	

NOTICE OF PROPOSED RULEMAKING AND ORDER ON RECONSIDERATION

Adopted: December 21, 2022

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Comment Date: [30 Days after Date of Publication in the Federal Register]

Reply Comment Date: [60 Days after Date of Publication in the Federal Register]

By the Commission: Chairwoman Rosenworcel and Commissioner Starks issuing separate statements.

I. INTRODUCTION

1. In this Notice of Proposed Rulemaking (Notice), we seek comment on a new three-year plan for Telecommunications Relay Services (TRS) Fund support of Internet Protocol Captioned Telephone Service (IP CTS). Based on recently emerging data that allows more reliable assessment of the costs of fully automatic IP CTS, we propose that IP CTS providers be compensated in different amounts, depending on whether captioning for a telephone call is provided on a fully automatic basis or with the help of communications assistants (CAs).¹ Pending the development of more precise metrics for assessing the quality of captioned telephone service, we believe the application of a separate, cost-based compensation formula to each service mode would promote the selection of an appropriate captioning method for each call. To determine the applicable compensation, we propose to continue using an average-cost methodology, subject to revised criteria for determining reasonable cost and to annual adjustments based on relevant cost factors.

2. We also propose a technical amendment to the provision of the Commission’s rules setting TRS Fund compensation for Internet Protocol Relay Service (IP Relay) to clarify the inflation adjustment factor applicable to such compensation.

3. We also deny the petitions of T-Mobile USA, Inc. (T-Mobile), and IDT Telecom, Inc. (IDT), for reconsideration of the Commission’s 2020 IP CTS compensation decision.

¹ In the fully automatic service mode, also known as “ASR-only” IP CTS, captioning for a telephone call is provided using only automatic speech recognition (ASR) technology. In this document, we use the term “CA-assisted” to refer to any mode of service in which a CA is involved in generating the captions for a call, including modes in which a CA revoices the spoken words into an ASR program.

II. BACKGROUND

4. Section 225 of the Communications Act of 1934, as amended (the Act), requires the Federal Communications Commission (Commission) to ensure that TRS are available to persons who are deaf, hard of hearing, or deafblind or have speech disabilities, “to the extent possible and in the most efficient manner.”² TRS are defined as “telephone transmission services” enabling such persons to communicate by wire or radio “in a manner that is functionally equivalent to the ability of a hearing individual who does not have a speech disability to communicate using voice communication services.”³

5. IP CTS, a form of TRS, “permits an individual who can speak but who has difficulty hearing over the telephone to use a telephone and an [IP]-enabled device via the Internet to simultaneously listen to the other party and read captions of what the other party is saying.”⁴ IP CTS is supported entirely by the Interstate TRS Fund (TRS Fund), which is composed of mandatory contributions collected from telecommunications carriers and voice over Internet Protocol (VoIP) service providers based on a percentage of each company’s annual revenue.⁵ IP CTS providers receive monthly payments from the TRS Fund to compensate them for the reasonable cost of providing the service, in accordance with a per-minute compensation formula approved by the Commission.⁶

6. Before 2018, compensation for IP CTS providers was determined by proxy, by averaging the payments made by state TRS programs to providers of an analogous service, Captioned Telephone Service (CTS).⁷ In 2018, the Commission determined that this approach, known as the Multistate Average Rate Structure (MARS) methodology, had resulted in providers receiving compensation greatly in excess of the average cost actually incurred to provide IP CTS.⁸ Instead, the Commission proposed that compensation be determined as a weighted average of the actual allowable costs reported by the providers.⁹ In 2020, the Commission adopted this average-cost methodology,¹⁰ declining to adopt a

² 47 U.S.C. § 225(b)(1).

³ *Id.* § 225(a)(3); 47 CFR § 64.601(a)(42).

⁴ 47 CFR § 64.601(a)(22). “With IP CTS, the connection carrying the captions between the relay service provider and the relay service user is via the [I]nternet rather than the public switched telephone network.” *Id.*

⁵ See 47 CFR § 64.604(c)(5)(iii)(A); *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Internet-based Captioned Telephone Service*, CG Docket No. 03-123, Declaratory Ruling, 22 FCC Rcd 379, 390, para. 25 (2007) (*2007 IP CTS Declaratory Ruling*); *Misuse of Internet Protocol (IP) Captioned Telephone Service; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket Nos. 13-24 and 03-123, Report and Order, 34 FCC Rcd 11265 (2019) (*2019 IP CTS Contributions Order*).

⁶ See 47 CFR § 64.604(c)(5)(iii)(E). The TRS Fund administrator reviews monthly compensation requests and supporting information submitted by providers of IP CTS and other forms of TRS and makes monthly payments of compensation in accordance with the applicable formula.

⁷ With CTS, telephone captioning is provided through the public switched telephone network (PSTN). See *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CC Docket No. 96-67, Declaratory Ruling, 18 FCC Rcd 16121, 16122-23, paras. 3-5 (2003).

⁸ *Misuse of Internet Protocol (IP) Captioned Telephone Service; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket Nos. 13-24 and 03-123, Report and Order, Declaratory Ruling, Further Notice of Proposed Rulemaking, and Notice of Inquiry, 33 FCC Rcd 5800, 5809-10, Tabl. 1, para. 18 (2018) (*2018 IP CTS Compensation Order* or *2018 IP CTS Metrics NOI*).

⁹ *Id.* at 5814-15, paras. 23-24 (applying average-cost methodology on an interim basis); *Misuse of Internet Protocol (IP) Captioned Telephone Service; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Structure and Practices of the Video Relay Service Program*, CG Docket Nos. 13-24, 03-123, and 10-51, Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, 35 FCC Rcd 10866, 10870, para. 10 (2020) (*2020 IP CTS Compensation Order* or *2020 IP CTS Further Notice*) (adopting average-cost methodology for IP CTS).

“tiered” compensation structure such as that applicable to video relay service (VRS).¹¹ The Commission deferred consideration of alternatives to cost-based compensation and whether to apply price-cap-like adjustments to IP CTS compensation.¹² From 2018 to 2021, the Commission progressively reduced the level of TRS Fund compensation to close the gap between compensation and average provider cost. To avoid disruption to the provision of IP CTS from immediate application of the average cost methodology, the Commission implemented the resulting reductions in stages, by approximately 10% annually, until the compensation level reached the level of providers’ average allowable costs (plus a 10% operating margin).¹³ As a result of these decisions, the compensation formula for IP CTS was reduced from \$1.9467 per minute in Fund Year 2017-18 to \$1.30 per minute in Fund Year 2021-22.¹⁴

7. In 2018, the Commission also authorized, for the first time, the provision of IP CTS on a fully automatic basis, using *only* automatic speech recognition (ASR) technology to generate captions, without the participation of a communications assistant.¹⁵ Pursuant to certification by the Consumer and Governmental Affairs Bureau (CGB or Bureau), every IP CTS provider is now authorized to use the ASR-only mode to generate captions—either as an alternative to CA-assisted captioning or as its sole mode of providing IP CTS.¹⁶

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¹⁰ Under the weighted-average method, the allowable expenses reported by all IP CTS providers for the most recent calendar year (historical year) and projected for the current calendar year (projected year) are totaled and the allowed operating margin (determined as a percentage of expenses) is added to total expenses. The resulting total is divided by the total minutes of demand for IP CTS reported or projected for those two years to yield an average cost per minute. This average cost per minute is a “weighted” average because it gives more weight to the per-minute cost incurred by providers with relatively high demand and less weight to the per-minute cost incurred by providers with relatively low demand. *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10867, n.28.

¹¹ *Id.* at 10888-89, paras. 43-47. Under a *tiered* compensation structure, a TRS provider’s monthly compensation payment is calculated based on the application of different rates to different portions of the compensable minutes submitted for each month of service, according to a predefined schedule of “tiers.” Typically, the highest rate is applied to the initial quantity of monthly minutes, from zero up to a defined maximum number, and a lower rate (or rates) is applied to additional minutes above that maximum. *Id.* at 10888, para. 43 n.132.

¹² *Id.* at 10871, para. 12.

¹³ *2018 IP CTS Compensation Order*, 33 FCC Rcd at 5815, para. 24; *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10870-71, para. 11.

¹⁴ *2018 IP CTS Compensation Order*, 33 FCC Rcd at 5816, para. 26; *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10870-71, para. 11.

¹⁵ *2018 IP CTS Compensation Order*, 33 FCC Rcd at 5827, para. 48.

¹⁶ See *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket No. 03-123, Memorandum Opinion and Order, 35 FCC Rcd 4568 (CGB 2020) (*MachineGenius Certification Order*); *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket No. 03-123, Memorandum Opinion and Order, 35 FCC Rcd 5635 (CGB 2020) (*Clarity Certification Order*); *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Misuse of Internet Protocol (IP) Captioned Telephone Service*, CG Docket Nos. 03-123 and 13-24, Memorandum Opinion and Order, 35 FCC Rcd 14193 (CGB 2020) (*InnoCaption Certification Order*); *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket No. 03-123, Memorandum Opinion and Order, 36 FCC Rcd 7246 (CGB 2021) (*ClearCaptions Certification Order*); *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket No. 03-123, 36 FCC Rcd 13241 (CGB 2021) (*CaptionCall Certification Order*); *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket No. 03-123, Memorandum Opinion and Order, DA 22-442 (CGB Apr. 20, 2022) (*Hamilton Certification Order*).

8. In 2018, the Commission also sought comment on whether and how to establish a separate compensation formula for the provision of fully automatic IP CTS.¹⁷ At the same time, the Commission issued a Notice of Inquiry seeking comment on establishing specific performance objectives and service quality metrics for the IP CTS program.¹⁸ In the *2020 IP CTS Compensation Order*, the Commission did not adopt such a separate ASR-only formula, concluding it did not yet have sufficient experience with fully automatic IP CTS to accurately estimate the relevant costs.¹⁹ The Commission simultaneously issued a Further Notice of Proposed Rulemaking proposing to add IP CTS metrics to the minimum TRS standards.²⁰ That Further Notice remains pending.

9. T-Mobile and IDT filed petitions for reconsideration of the *2020 IP CTS Compensation Order*.²¹ T-Mobile requests reconsideration of the Commission's determination of provider compensation, arguing that the Commission did not have a reasoned basis for adopting a single compensation formula rather than a tiered structure and did not adequately consider certain costs.²² IDT, while not contesting the level of provider compensation, contends that the Commission should have reduced the applicable TRS Fund contribution factor to parallel the reduction in IP CTS compensation.²³ CGB released a public notice seeking comment on the petitions for reconsideration.²⁴ Interested parties filed three comments and two reply comments on the T-Mobile petition.²⁵ No comments were filed on the IDT petition, and IDT filed a reply comment.²⁶

10. On May 25, 2021, six of the seven then-certified providers of IP CTS filed a letter requesting that the Commission halt the reduction in IP CTS compensation from \$1.42 per minute to \$1.30 per minute scheduled for July 1, 2021.²⁷ On June 25, 2021, CGB released a public notice seeking

¹⁷ *2018 IP CTS Compensation Order*, 33 FCC Rcd at 5845, para. 93.

¹⁸ *2018 IP CTS Metrics NOI*, 33 FCC Rcd at 5868, paras. 155-81.

¹⁹ *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10887, paras. 41-42.

²⁰ *2020 IP CTS Further Notice*, 35 FCC Rcd at 10897, paras. 62-92.

²¹ IDT Telecom Inc., Petition for Reconsideration, CG Docket Nos. 13-24, 10-51, and 03-123 (filed Oct. 30, 2020), <https://ecfsapi.fcc.gov/file/1030027812500/TRS%20IPCTS%20Rate%20Setting%20Final%2010302020.pdf> (IDT Petition); T-Mobile USA, Inc., Sprint Communications Company L.P., Petition for Reconsideration, CG Docket Nos. 13-24, 10-51, and 03-123, (filed Nov. 13, 2020), https://www.fcc.gov/ecfs/file/download/DOC-5d70d008ea400000-A.pdf?file_name=IP%20CTS%20Petition%20for%20Reconsideration%20-%20Sprint%20Accessibility%20-%2011.13.2020.pdf (T-Mobile Petition).

²² T-Mobile Petition at 2-3.

²³ IDT Petition at 2-3.

²⁴ *Comment Sought on Petitions for Reconsideration of the Report and Order on TRS Fund Compensation for Internet Protocol Captioned Telephone Service*, CG Docket Nos. 13-24, 03-123, and 10-51, Public Notice, 35 FCC Rcd 13032 (CGB 2020); *Internet Protocol Captioned Telephone Service: Comment Dates for Reconsideration Petitions*, CG Docket Nos. 13-24, 03-123, and 10-51, Public Notice, 36 FCC Rcd 4487 (CGB 2021).

²⁵ See CaptionCall, LLC Opposition (rec. Mar. 9, 2021); ClearCaptions, LLC Comments (rec. Mar. 9, 2021); Hamilton Relay Inc. Comments (rec. Mar. 9, 2021); CaptionCall Reply Comments (rec. Mar. 19, 2021); T-Mobile Reply Comments (rec. Mar. 19, 2021).

²⁶ See IDT Reply Comments (rec. Mar. 19, 2021).

²⁷ Letter from Dixie Ziegler, Hamilton Relay, Inc., Cristina Duarte, Mezmo Corporation d/b/a InnoCaption, Michael Strecker, ClearCaptions, LLC, Bruce Peterson, CaptionCall, LLC, Scott R. Freiermuth, T-Mobile USA, Inc., and Erik Strand, MachineGenius, Inc. (Joint Providers), to Marlene H. Dortch, FCC, CG Docket Nos. 13-24 and 03-123 (filed May 25, 2021) (Joint Providers May 25 Letter), <https://www.fcc.gov/ecfs/document/10525399911136/1>; see also *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10884-86, paras. 35-37.

comment on the request.²⁸ The Commission received three comments and three reply comments.²⁹ On July 1, 2021, the compensation adjustment to \$1.30 per minute became effective through June 2022.

11. On June 30, 2022, the Bureau released an Order in which, among other things, the Bureau temporarily waived the expiration of the \$1.30 per-minute compensation formula, extending it through June 30, 2023, or the effective date of action by the Commission to establish compensation levels for IP CTS, whichever is earlier.³⁰

III. NOTICE OF PROPOSED RULEMAKING ON IP CTS COMPENSATION

12. We seek comment on establishing an IP CTS compensation plan for a new compensation period. We propose to apply different formulas to the provision of CA-assisted and ASR-only IP CTS. We also seek comment on additional issues, including the appropriate application of such formulas; identifying the costs attributable to ASR-only captioning; whether to adjust allowable-cost criteria and the allowed operating margin; calculation of average per-minute cost and compensation level(s); the duration of the compensation period; adjustment factors for inflation or productivity; and alternatives to reasonable-cost-based compensation.

A. Compensation for ASR-Only IP CTS

13. *Separate ASR-only compensation formula.* As a threshold matter, we revisit the question, deferred in the *2020 IP CTS Compensation Order*, of whether to adopt a separate compensation formula for ASR-only IP CTS. Currently, all IP CTS providers receive TRS Fund compensation at the same per-minute level, regardless of whether captioning is provided with CA assistance or in the fully automatic mode.

14. In the *2020 IP CTS Compensation Order*, while noting that the ASR-only mode allowed substantial reductions in the cost of providing IP CTS, the Commission deferred the issue of establishing a specific compensation formula for ASR-only captioning.³¹ With only two companies (both new entrants) then authorized to provide fully automatic IP CTS, the Commission reasoned that sufficient information was not yet available on the specific cost of that service mode.³² The Commission also suggested that, even after sufficient cost data became available, application of a single compensation formula might still be warranted. Noting that the two service modes are essentially different technological means for delivering a single service,³³ the Commission pointed out that a single

²⁸ *Consumer and Governmental Affairs Bureau Seeks Comment on Request for Freeze of IP CTS Compensation Level*, CG Docket Nos. 03-123 and 13-24, Public Notice, 36 FCC Rcd 10058 (CGB 2021); *see also Consumer and Governmental Affairs Bureau Announces Dates for Filing Comments on Request for Freeze of IP CTS Compensation Level*, CG Docket Nos. 03-123 and 13-24, Public Notice, 36 FCC Rcd 11191 (CGB 2021).

²⁹ *See* Hamilton, Mezmo Corporation dba InnoCaption, ClearCaptions, CaptionCall, T-Mobile, and MachineGenius, Inc. Comments (rec. Jul. 30, 2021); Hamilton Compensation Freeze Comments (rec. Jul. 30, 2021); T-Mobile Compensation Freeze Comments (rec. Jul. 30, 2021); Clear2Connect Coalition Compensation Freeze Reply Comments (rec. Aug. 9, 2021), T-Mobile Compensation Freeze Reply Comments (rec. Aug. 9, 2021), Ultratec, Inc. and Captel Inc. Reply Comments (rec. Aug. 9, 2021).

³⁰ *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Structure and Practices of the Video Relay Service Program*, CG Docket Nos. 03-123 and 10-51, Order, DA 22-699, at 4-5, paras. 11-14 (CGB June 30, 2022).

³¹ *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10887, para. 41 (noting that adopting compensation for ASR-only without sufficient cost data ran the risk of undercompensating providers and “creating a disincentive for providers to adopt this highly promising technology”).

³² *Id.* at 10887-88, para. 42.

³³ *Id.* (describing ASR-only IP CTS as a reasonably close economic substitute to CA-assisted IP CTS and noting providers may offer a hybrid approach that allows individual users to access and switch between ASR-only and CA-assisted IP CTS).

compensation formula may be warranted to encourage IP CTS providers to use the most cost-effective technology for providing this service.³⁴

15. Since 2020, the availability of cost data has improved. All currently certified IP CTS providers have been authorized to provide captioning in the ASR-only mode, either as an alternative to CA-assisted captioning or as the provider's sole captioning method.³⁵ Total minutes of ASR-only IP CTS have greatly increased, and a substantial body of cost and demand data is being collected on that mode of service.³⁶ Historical cost and demand data for calendar year 2021, in which ASR-only usage increased to some 23% of monthly IP CTS minutes, was reported by providers in March 2022, along with projected cost and demand for 2022 and 2023. These reports appear to confirm that there are significant differences in the costs attributable to each service mode. The TRS Fund administrator reports that the weighted average of provider costs attributed to ASR-only IP CTS (expenses plus 10% operating margin) in 2021 was \$0.6977, \$0.30 less per minute than the average for CA-assisted IP CTS (\$0.9979).³⁷ We seek comment on the extent to which these estimates, based on provider-reported data, accurately reflect cost differences between ASR-only and CA-assisted IP CTS.³⁸

16. Further, notwithstanding the Commission's prior reservations, we believe there are special considerations warranting the application of different compensation formulas to the two service modes, at least as a temporary measure. On the one hand, there is evidence, including tests conducted by a federally funded research and development center, that ASR-only captioning offers better *speed of answer* (i.e., it takes less time for captioning to commence after a call has begun),³⁹ lower *caption delay* (the time lag between words being spoken on a phone call and the appearance of captions on the user's screen),⁴⁰ and a level of *accuracy* that is generally comparable to (and in many instances, greater than)

³⁴ *Id.* (“[I]t may not be necessary or appropriate to have a separate compensation rate for fully automatic IP CTS in order to advance the objectives of section 225.”); *see also* 47 U.S.C. § 225(b)(1) (directing the Commission to ensure that relay services are available “in the most efficient manner”); *id.* 225(d)(2) (requiring the Commission to ensure its TRS regulations do not discourage or impair the development of improved technology).

³⁵ Additional applicants are currently seeking authorization to provide TRS Fund-supported IP CTS exclusively in the ASR-only mode. *See Comment Sought on Application of NexTalk, Inc., for Certification as Provider of Internet Protocol Captioned Telephone Service*, Public Notice, DA 22-170 (CGB Feb. 17, 2022) (*NexTalk Application Public Notice*); *Comment Sought on Application of Rogervoice for Certification as Provider of Internet Protocol Captioned Telephone Service*, Public Notice, DA 22-267 (CGB Mar. 14, 2022) (*Rogervoice Application Public Notice*); *Comment Sought on Application of Global Caption, Inc., for Certification as Provider of Internet Protocol Captioned Telephone Service*, Public Notice, DA 22-375 (CGB Apr. 7, 2022) (*Global Caption Application Public Notice*); *Comment Sought on Application of Nagish, Inc., for Certification as Provider of Internet Protocol Captioned Telephone Service and Internet Captioned Relay Service*, Public Notice, DA 22-1090 (CGB Oct. 12, 2022) (*Nagish Application Public Notice*).

³⁶ *See* Letter from Eliot Greenwald, FCC, to Marlene Dortch, FCC, CG Docket Nos. 03-123 and 10-51, (Nov. 30, 2022) (IP CTS Demand Data) (redacted version). Rolka Loube Associates, LLC, Interstate Telecommunications Relay Services Fund: Payment Formula and Fund Size Estimate, CG Docket Nos. 03-123 and 10-51, at 1-3.b (posted by CGB May 2, 2022) (2022 TRS Compensation Report) (estimating the average cost per minute of providing ASR-only IP CTS in 2021 and 2022).

³⁷ *See* 2022 TRS Compensation Report, Exhs. 1-3.a, 1-3.b.

³⁸ As noted below, we intend that our compensation determination will take account of updated cost and demand data to be filed by providers in February 2023, and the record will remain open for interested parties to comment on such additional data. *See infra* para. 38.

³⁹ *See, e.g., CaptionCall Certification Order* at 4, para. 7 (citing CaptionCall's report that its system connects 99% of ASR-only calls within less than two seconds, and its prediction that the availability of ASR when all CAs are occupied will “eliminate hold time beyond the fractions of a second that it takes the [Automatic Call Distributer] to detect and route a call to” an available CA or to ASR).

⁴⁰ *MachineGenius Certification Order*, 35 FCC Rcd at 4570-71, para. 6; *Clarity Certification Order*, 35 FCC Rcd at 5637-38, para. 6; *InnoCaption Certification Order*, 35 FCC Rcd at 14198, paras. 10-11; *ClearCaptions Certification* (continued....)

that of CA-assisted captioning.⁴¹ On the other hand, the record also indicates that for some portion of IP CTS calls, CA-assisted captioning can result in better service or is preferred by consumers.⁴² Further, some research indicates that ASR technology may show algorithmic bias in the accuracy with which it transcribes voices; a 2020 study of speech recognition systems from five major tech companies found that the systems misidentified words spoken by black individuals at a substantially higher rate than words spoken by white people.⁴³ Given the apparently substantial cost differences, the continued application of a single compensation formula to both service modes could encourage IP CTS providers to use the lower-cost, more profitable ASR-only mode even for those calls where a user could benefit from having a CA involved.⁴⁴ We seek comment on the foregoing analysis. Is it consistent with recent test results of the speed and accuracy of ASR-only and CA-assisted IP CTS?

17. In addition, we note that the Commission has proposed to adopt measures and metrics that would allow more precise assessment of IP CTS service quality, including compliance with minimum TRS standards.⁴⁵ We recognize the importance of this question, and work continues on development of more precise measures and metrics for assessing how well each provider and captioning approach performs in meeting the objectives of section 225.⁴⁶ Among the potential benefits of such metrics is the

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Order, 36 FCC Rcd at 7250, para. 8; *CaptionCall Certification Order* at 4-5, para. 9; *Hamilton Certification Order* at 4-5, paras. 9.

⁴¹ *MachineGenius Certification Order*, 35 FCC Rcd at 4571-72, para. 7; *Clarity Certification Order*, 35 FCC Rcd at 5638-39, para. 7; *InnoCaption Certification Order*, 35 FCC Rcd at 14198-99, paras. 12-13; *ClearCaptions Certification Order*, 36 FCC Rcd at 7251-52, paras. 10-11; *CaptionCall Certification Order* at 5-6, paras. 10-11; *Hamilton Certification Order* at 5, paras. 10-11.

⁴² See, e.g., Letter from Tamar E. Finn, Counsel to ClearCaptions, LLC to Marlene H. Dortch, FCC, CG Docket Nos. 13-24, 03-123, and 10-51, Attach. at 7 (filed April 28, 2022) (*ClearCaptions April 28 Ex Parte*) (stating that there continue to be cases where a human CA “is best able to handle a call”); Letter from Cristina O. Duarte, Mezmo Corporation (dba InnoCaption), to Marlene H. Dortch, FCC, CG Docket No. 03-123, Attach. at 10 (filed June 7, 2022) (*InnoCaption April 29 Ex Parte*) (“Hybrid captioning model is critical to functional equivalence and it is important to ensure CA assisted captioning remains viable.”); Letter from David A. O’Connor, Counsel to Hamilton Relay, Inc., to Marlene H. Dortch, FCC, CG Docket Nos. 13-24 and 03-123 (filed April 9, 2021) (describing research finding that using a CA with ASR produced 81% fewer total errors than using ASR alone) (*Hamilton April 2021 Ex Parte*); see also Letter from Blake Reid, Counsel to TDI, to Marlene H. Dortch, FCC, CG Docket No. 03-123 et al., at 2 (filed May 18, 2022) (Accessibility Advocacy and Research Organizations May 18 *Ex Parte*) (urging the Commission to “act quickly to address the long-overdue adoption of metrics and standards for the quality of Internet Protocol Captioned Telephone Services (IP CTS) given the widespread proliferation of ASR-based IP CTS”).

⁴³ See Allison Koenecke et al., “Racial disparities in automated speech recognition,” *Proceedings of the National Academy of Sciences* Vol. 117 No. 14 (2020), <https://www.pnas.org/doi/10.1073/pnas.1915768117> (studying “state-of-the-art ASR systems” developed by five major tech companies and finding an average word error rate of 35% for black speakers compared to 19% for white speakers); see also “There Is a Racial Divide in Speech-Recognition Systems, Researchers Say,” *The New York Times* (Mar. 23, 2020), <https://www.nytimes.com/2020/03/23/technology/speech-recognition-bias-apple-amazon-google.html>.

⁴⁴ In noting that the availability of CA assistance may improve the quality of service on some calls, we do not mean to suggest that, if a provider chooses to provide IP CTS exclusively in one mode or the other, that provider would necessarily fail to provide functionally equivalent service. The Commission has granted certification to a number of applicants proposing to offer only fully automatic IP CTS, based in part on a showing that their average performance on testing of both caption delay and accuracy exceeded that of an average CA-assisted IP CTS provider. *MachineGenius Certification Order*, 35 FCC Rcd at 4570-72, paras. 6-7; *Clarity Certification Order*, 35 FCC Rcd at 5637-39, paras. 6-7.

⁴⁵ *2020 IP CTS Further Notice*, 35 FCC Rcd at 10897, paras. 62-92.

⁴⁶ See *id.*

ability to make more fine-grained policy determinations regarding TRS Fund compensation. Pending the development of such metrics, we seek to apply cost-based compensation formulas for CA-assisted and ASR-only IP CTS that allow providers (or consumers, when able to choose) to select an appropriate captioning method for each call based primarily on considerations of quality, not cost.⁴⁷ We seek comment on this analysis.

18. As a further consideration, if the cost differences between ASR-only and CA-assisted IP CTS are as substantial as they appear, then—as long as a substantial portion of IP CTS minutes are provided with CA assistance—continued application of a single, average-cost-based compensation formula to both modes of service could confer above-average profits on those IP CTS providers that produce captions predominantly or exclusively in the ASR-only mode. While such above-average profits earned during a limited period of time may serve to incentivize and reward innovation, prolonged payment of excessive compensation may result in waste of TRS Fund resources—and could significantly increase the risk of fraud in the IP CTS program, if the availability of unusually high profits increases the attractiveness of the program to unscrupulous actors. We seek comment on this analysis.

19. To address the concerns discussed above, we propose that during the next compensation period, different levels of per-minute compensation should be applicable to each service mode, with the compensation formula for each mode aligned with the reasonable cost attributable to that mode. By setting a level of per-minute compensation for the ASR-only service mode that tracks its actual cost, we believe we can maintain an appropriate incentive for IP CTS providers to use the ASR-only mode where warranted, while also continuing to support CA-assisted IP CTS where appropriate, e.g., where CA-assisted IP CTS may be needed to achieve functional equivalence. Given its lower reported cost, the fact that all IP CTS providers have now begun using ASR-only IP CTS, and the likelihood of continuing improvements in ASR technology, we believe IP CTS providers will continue to be motivated to offer this service mode when preferred by users or otherwise warranted.

20. We seek comment on our proposal and the above assumptions. If we apply different compensation formulas to the ASR-only and CA-assisted service modes, should we also, within the CA-assisted category, establish a separate formula for CA-assisted IP CTS using the Communications Access Realtime Translation (CART) method to account for cost differences?⁴⁸ Alternatively, should we continue to determine a single level of compensation for IP CTS, based on the weighted average of providers' reasonable costs for the service as a whole? What are the costs and benefits of establishing separate compensation levels for IP CTS calls, compared to maintaining the current approach? Are there other factors we should consider in setting compensation formulas for ASR-only and CA-assisted service?⁴⁹

21. *Determining which compensation formula is applicable.* If we establish separate compensation formulas for CA-assisted and ASR-only service, then it must be clear—to both providers and the TRS Fund administrator—which formula applies to any particular call or portion of a call. We propose to codify in the Commission's rules the requirement, currently imposed as a condition of granting certification for the provision of ASR-only in addition to CA-assisted captioning, that IP CTS providers identify in their monthly call detail reports those calls and minutes that are captioned as ASR-only and

⁴⁷ See Letter from Blake E. Reid, Counsel to TDI, to Marlene H. Dortch, FCC, CG Docket Nos. 22-408, 03-123, and 13-24, at 1-3, 5 (filed Dec. 14, 2022) (Accessibility Coalition December 14, 2022 *Ex Parte* Letter) (Urging interim steps towards equitable compensation pending further action on establishing metrics and measures for functionally equivalent IP CTS).

⁴⁸ See Letter from Cristina O. Duarte, Mezmo Corporation dba InnoCaption, to Marlene H. Dortch, FCC, CG Docket Nos. 22-408, 03-123, and 13-24, at 1 (filed Dec. 14, 2022) (InnoCaption December 14, 2022 *Ex Parte* Letter).

⁴⁹ As noted below, *see infra* para. 26, we do not propose to reopen any questions about the scope of allowable costs, except as specifically indicated herein.

those captioned as CA-assisted.⁵⁰ If the service mode changes in the middle of a call, we propose that portions of the call (i.e., number of minutes, specified to one decimal place) that are ASR-only and CA-assisted, respectively, shall be correctly identified as such.

22. We also propose to amend our rules to make clear which compensation formula is applicable to calls for which a CA or other provider personnel (1) is not involved in the initial generation of the captions, but (2) is monitoring caption quality while a call is in progress and may also be correcting captions during the call.⁵¹ We seek comment on the extent to which such monitoring is currently practiced and how it is handled operationally. For example, where CAs are engaged in monitoring ASR-generated captions, do they also undertake to correct any mistakes themselves, or do they simply assess the caption quality to determine whether the call needs to be transferred to the CA-assisted service mode? Are there circumstances in which one CA may simultaneously monitor more than one ASR-captioned call? Are there other relevant scenarios that we should consider, involving both a CA and the use of ASR on a single call?

23. We propose that, if a CA is only assigned to monitor or correct one call at a time, the CA-assisted compensation formula shall apply to any call (or any call minutes, if a CA is not present for the entire call) to which that CA is assigned. On the other hand, if a CA (or other employee) is monitoring more than one call, or is splitting time between monitoring a call and attending to other tasks, then—because the employee’s involvement appears to be more in the nature of general supervision of ASR-only operations, we propose that the ASR-only formula shall apply to each call being monitored. We seek comment on these proposals. Are there any other kinds of situations in which the proper classification of calls and minutes as ASR-only or CA-assisted needs clarification?

24. *Identifying the costs of each service mode.* We also seek comment on how to determine with greater precision the reasonable cost of providing IP CTS on a fully automatic or CA-assisted basis. Are any additional categories or subcategories needed in the administrator’s cost reporting template to appropriately capture the costs of each service mode? Are any such changes necessary to capture costs that may be incurred in providing users the ability to choose a preferred service mode, or to switch between ASR-only and CA-assisted services during a call? Are there other steps we could take, consistent with cost-causation principles, to ensure that our compensation formulas provide appropriate incentives for providers to offer such choices to consumers or otherwise to advance the statutory goal of functional equivalence?

25. Although the Commission required IP CTS providers offering both modes of service to specify the costs attributable to each mode,⁵² there is a lack of consistency in how various providers have responded to this directive. For certain cost categories, such as facilities, indirect costs, and marketing, some providers directly assigned the costs attributed to each service mode, while other providers allocated the same costs based on the share of minutes provided. In accordance with well-established principles of regulatory accounting, we tentatively conclude that when it is possible to directly assign costs to either ASR-only or CA-assisted IP CTS, providers must do so, and when that is not possible, they must reasonably allocate such costs based on direct analysis of the origin of the costs themselves.⁵³ We seek comment on this tentative conclusion.

⁵⁰ See, e.g., *InnoCaption Certification Order*, 35 FCC Rcd at 14198-99, paras. 10-13.

⁵¹ See, e.g., Hamilton April 2021 *Ex Parte* at 1 (referring to “important new research into the use of [ASR] in combination with [CAs] to significantly improve accuracy and minimize delay” and noting that “this combination of a CA and dynamic ASR virtually eliminated any issues with captioning delay”).

⁵² See *2018 IP CTS Compensation Order*, 33 FCC Rcd at 5835-36, para. 66.

⁵³ The Commission has applied this principle in a variety of contexts where costs of regulated companies must be apportioned among multiple services. See, e.g., 47 CFR § 76.924(f) (for cable operators electing cost-of-service regulation, generally requiring that costs be directly assigned where possible, and otherwise allocated, where possible, based on direct analysis of the origin of the costs); *id.* § 64.901(b)(2), (3)(i) (requiring that carrier costs be

(continued....)

B. Allowable Costs

26. In the *2020 IP CTS Compensation Order*, the Commission decided that IP CTS costs could be reasonably determined using, for the most part, the same allowable-cost criteria applicable to other forms of Internet-based TRS.⁵⁴ As the only exception, the Commission determined that the TRS Fund should support reasonable outreach costs of IP CTS providers.⁵⁵ Except as specifically identified herein, we do not seek to revisit these determinations. Nonetheless, in order to ensure that we set rates for the foregoing periods at levels that promote the statutory goal of functional equivalence at a time when both technology and consumer use of communications services are rapidly evolving, we seek comment on whether adjustments to certain cost criteria are warranted for IP CTS.

1. Research and development to enhance functional equivalency.

27. We propose to revise our allowable cost criteria to allow TRS Fund support for the reasonable cost of research and development to enhance the functional equivalency of IP CTS, including improvements in service quality that may exceed the Commission's TRS mandatory minimum standards. Currently, the TRS Fund supports research and development conducted by an IP CTS provider to ensure that its service meets the applicable TRS mandatory minimum standards, but does not compensate providers for developing IP CTS enhancements that exceed this criterion.⁵⁶ In establishing this limitation, the Commission reasoned that the functionality that TRS providers must provide is defined by the applicable mandatory minimum standards,⁵⁷ and that the TRS Fund was not intended to be a "source of funding for the development of TRS services, features, and enhancements that, although perhaps desirable, are not necessary for the provision of functionally equivalent TRS service."⁵⁸

28. We now propose to revisit this criterion with respect to IP CTS costs.⁵⁹ While it is true that, to be eligible for TRS Fund support, a TRS provider is only required to meet our minimum

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 directly assigned to either regulated or nonregulated activities whenever possible, and otherwise allocated, whenever possible, based upon direct analysis of the origin of the costs themselves); *Separation of Costs of Regulated Telephone Service from Costs of Nonregulated Activities*, CC Docket No. 86-111, Report and Order, 2 FCC Rcd 1298, 1318-19, paras. 161-62 (1987). When direct analysis is not possible, common cost categories should be allocated based upon an indirect, cost-causative linkage to another cost category (or group of cost categories) for which a direct assignment or allocation is available. 47 CFR § 64.901(b)(1)(ii).

⁵⁴ *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10873-75, paras. 8-10.

⁵⁵ *Id.* at 10875-76, para. 21.

⁵⁶ *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Structure and Practices of the Video Relay Service Program*, CG Docket Nos. 03-123 and 10-51, Report and Order and Order, 32 FCC Rcd 5891, 5896, para. 11 (2017) (*2017 VRS Compensation Order*), citing *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CC Docket No. 90-571, CC Docket No. 98-67, CG Docket No. 03-123, Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, 19 FCC Rcd 12475, 12547-48, paras. 189-90 (2004) (*2004 TRS Cost Recovery Order*); *Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket Nos. 10-51 and 03-123, Report and Order and Further Notice of Proposed Rulemaking, 28 FCC Rcd 8618, 8629, para. 21 (2013) (*2013 VRS Reform Order*).

⁵⁷ *2004 TRS Cost Recovery Order*, 19 FCC Rcd at 12547-48, para. 189.

⁵⁸ *2017 VRS Compensation Order*, 32 FCC Rcd at 5896, para. 11; see also *2013 VRS Reform Order*, 28 FCC Rcd at 8629, para. 21 (stating that, absent such a limitation, "R&D funding could . . . be unlimited and multiple providers would be able to expend R&D funds on similar or identical enhancements and would not share the results with existing or potential competitors").

⁵⁹ In this Notice, we seek comment on the allowability of research and development costs specifically with respect to IP CTS. In the pending VRS compensation proceeding, commenters have raised an analogous concern with respect to VRS. The Commission deferred consideration of the analogous issue with respect to IP Relay, pending its

(continued....)

standards,⁶⁰ our rules do not *prohibit* providers from exceeding the minimum standards.⁶¹ Further, section 225 of the Act states that our TRS regulations must not “discourage or impair the development of improved technology.”⁶² In addition, the Commission’s policy is to encourage IP CTS providers to compete for subscribers on the basis of service quality, including by introducing innovative captioning processes and features.⁶³

29. We believe adjusting our criteria to allow TRS Fund support for research and development into IP CTS improvements that meet *or* exceed the Commission’s minimum standards will (1) increase the likelihood that, in fact, the service actually provided does meet or exceed those standards⁶⁴ and (2) harmonize our IP CTS cost criteria with the Congressional intent to encourage the development of improved technology for TRS.⁶⁵ We seek comment on this proposal and the cost and benefits of allowing providers to recover the reasonable cost of such research and development.

30. *Measures to prevent waste.* We also invite comment on how we should ensure that the benefit of the conducted research and development actually enhances functional equivalency. We believe that by using an average cost methodology and setting compensation formulas for multi-year periods, we provide substantial incentives for providers to use research and development funds wisely and avoid incurring unnecessary costs. However, we seek comment on whether additional safeguards are needed. Should providers be required to report on conducted research and development? If so, how often? What information should be included in such reports to allow the Commission or TRS Fund administrator to audit research and development costs? Further, in determining the reasonable costs for research and development, should we account for the benefits that may inure to providers, for example, licensing or earning profits from research and development outside the TRS program?

2. Numbering

31. Pursuant to a prior Commission ruling, the costs associated with acquiring a telephone number and assigning it to a customer are not currently supported by the TRS Fund.⁶⁶ The Commission reasoned that such costs are not attributable to the use of a relay service to facilitate a call, noting that analogous costs incurred by voice service providers are typically passed through to their customers.⁶⁷ In the *2022 IP Relay Compensation Order*, however, the Commission revisited this issue with respect to IP Relay, concluding that, because the Commission’s rules require the assignment of North American Numbering Plan (NANP) numbers to IP Relay users, it seems illogical to treat such costs as if they are

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resolution for other forms of TRS. *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Petition for Rulemaking of Sprint Corporation*, CG Docket No. 03-123, RM-11820, Report and Order, FCC 22-48, at 11, para. 26 (June 30, 2022) (*2022 IP Relay Compensation Order*).

⁶⁰ See 47 CFR § 64.604(c)(5)(iii)(E)(4) (“The TRS Fund administrator shall make payments only to eligible TRS providers operating pursuant to the mandatory minimum standards as required in this section.”).

⁶¹ To be granted certification as a TRS provider, an applicant must establish that it will “meet *or exceed*” the minimum TRS standards. 47 CFR § 64.606(b)(2)(i) (emphasis added).

⁶² 47 U.S.C. § 225(d)(2).

⁶³ See *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10884-85, para. 35.

⁶⁴ See 47 CFR § 64.606(b)(2)(i).

⁶⁵ See 47 U.S.C. § 225(d)(2).

⁶⁶ *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; E911 Requirements for IP-Enabled Service Providers*, CG Docket No. 03-123, CC Docket No. 98-67, WC Docket No. 05-196, Second Report and Order and Order on Reconsideration, 24 FCC Rcd 791, 812-16, paras. 46-54 (2008) (*Second Internet-Based TRS Numbering Order*).

⁶⁷ *Id.*

not attributable to the use of relay to facilitate a call.⁶⁸ The Commission also reasoned that the circumstances relevant to recovery of number acquisition costs by voice service providers and IP CTS providers are not equivalent. While voice service providers have a billing relationship with their consumers, IP CTS providers typically do not, and there seems to be little point in creating such a relationship for the sole purpose of passing through what likely would be a *de minimis* monthly charge for any particular IP CTS user.⁶⁹ To harmonize IP CTS compensation methodology with the IP Relay ruling, we propose to also treat as allowable the reasonable costs of acquiring NANP telephone numbers for IP CTS users, in those circumstances where such acquisition is necessary to provide the service.⁷⁰ We seek comment on our proposal and the costs and benefits of allowing recovery of number acquisition costs.

3. User Access Software

32. Pursuant to longstanding Commission rulings, twice upheld by the D.C. Circuit, the TRS Fund does not support the provision of the equipment used by a consumer to access TRS.⁷¹ The Commission has previously interpreted this restriction to extend to the “installation of the equipment or any necessary software.”⁷² However, the Commission has not specifically addressed whether the TRS Fund should support the expenses of providing software that is *not* designed for installation on provider-distributed equipment, but rather is usable on off-the-shelf user devices supplied by third parties.⁷³ Historically, IP CTS has been most commonly accessed via provider-distributed devices. However, a number of providers offer IP CTS via software applications that consumers may access via any web

⁶⁸ See 2022 IP Relay Compensation Order at 11, para. 26.

⁶⁹ *Id.*

⁷⁰ To date, such number acquisition has *not* been routinely required. IP CTS is most commonly provided as an adjunct to the consumer’s existing telephone service. In such cases, the consumer already has a telephone number, and it is not necessary for the IP CTS provider to assign one. However, for some types of IP CTS, the user initiates an IP CTS call by connecting to the IP CTS provider via the Internet, such as web-based or wireless-based IP CTS, and the provider assigns a new NANP telephone number to the IP CTS user, which is different from the user’s existing telephone number and is used only for processing and transmitting IP CTS calls. See *Misuse of Internet Protocol (IP) Captioned Telephone Service; Telecommunications Relay Services and Speech-to-Speech Services for individuals with Hearing and Speech Disabilities*, CG Docket Nos 13-24 and 03-123, Report and Order, Further Notice of Proposed Rulemaking, and Order, 34 FCC Rcd 691, 711-12, para. 44 (2019) (waiving certain emergency call handling rules for IP CTS provided under this configuration).

⁷¹ *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket No. 03-123, Memorandum Opinion and Order, 21 FCC Rcd 8063, 8071, para. 17 (2006) (2006 TRS and STS MO&O); see also 2007 TRS Rate Methodology Order, 22 FCC Rcd at 20170-71, para. 82; 2013 VRS Reform Order, 28 FCC Rcd at 8696, paras. 193-94; 2017 VRS Compensation Order, 32 FCC Rcd at 5897-901, paras. 12-19; 2018 IP CTS Compensation Order, 33 FCC Rcd at 5819-20, paras. 33-34; *Sorenson Communications, Inc., v. FCC*, 659 F.3d 1035, 1044-45 (D.C. Cir. 2011) (*Sorenson 2011*) (statute does not require that “VRS users receive free equipment and training,” only that they “pay no higher rates for calls than others pay for traditional phone services,” and exclusion of CPE costs does not undermine section 225 goal of not discouraging or impairing development of improved technology); *Sorenson Communications, Inc., v. FCC*, 765 F.3d 37, 44 (D.C. Cir. 2014) (*Sorenson 2014*).

⁷² 2006 TRS and STS MO&O, 21 FCC Rcd at 8071, para. 17 (“Compensable expenses . . . do not include expenses for customer premises equipment—whether for the equipment itself, equipment distribution, or installation of the equipment or any necessary software.”).

⁷³ At the time the prohibition on equipment cost recovery was adopted, TRS user software was typically proprietary software run on provider-distributed equipment. See, e.g., 2013 VRS Reform Order, 28 FCC Rcd at 8697, para. 194 n.513 (“Most VRS software currently available is proprietary.”).

browser or may download to off-the-shelf devices owned by the consumer, such as a computer, tablet, or mobile device.⁷⁴

33. We propose to allow TRS Fund support for the reasonable cost of developing, maintaining, and providing software and web-based applications that enable users to access IP CTS from off-the-shelf user devices. Where a type of software can be used with a variety of devices purchased from other sources and is necessary for a customer to access and use the service, we believe that such access software, even though it may be installed on or downloaded to a user device, is appropriately classified as associated with the relay *service*, rather than with *equipment*. Further, we believe the Commission's statutory directive to make TRS widely available in the most efficient manner will be advanced if the TRS Fund supports the provision of software that enables access to IP CTS from a wide range of devices.⁷⁵ In addition, compatibility with off-the-shelf equipment facilitates consumers' ability to choose from a range of service providers based on the quality of their captioning service.⁷⁶ We are not proposing to include the costs of providing any devices to users, just the costs of developing and providing software that is necessary to provide IP CTS on off-the-shelf devices. We seek comment on our proposal, its costs and benefits, and the above assumptions. Are there more specific characteristics or limitations we should identify for determining whether access software costs should be allowable? We encourage commenters to provide specific examples of the types of software that might be allowed and the amount of such costs that would be covered under this proposal.

34. Should we also, as a party has suggested, allow TRS Fund support for the cost of IP CTS access software that is developed and provided for proprietary devices that are designed to be used with a particular provider's service (or with a service that has been licensed to use a particular IP CTS technology)?⁷⁷ What would be the costs and benefits of such a change? How would allowing such cost recovery promote the objectives of section 225 of the Act? Would such a change require us to revisit the Commission's past determination that its rules should promote the ability of users to access TRS from a variety of commercially available devices?⁷⁸ Would allowing such recovery tend to "lock in" consumers, increasing their dependence on a single supplier of IP CTS technology?⁷⁹ If we were to allow such cost recovery, how should the Commission distinguish between costs of the software needed to access IP CTS from proprietary devices, which would be supported by the TRS Fund, and software that is integral to operation of the device, which would continue to be unsupported?

35. *Measures to prevent waste.* We seek comment on how to ensure the appropriate allocation of software costs between software that a consumer can download to the consumer's off-the-

⁷⁴ See, e.g., *CaptionCall Certification Order*, at 2, para. 3; *ClearCaptions Certification Order*, 36 FCC Rcd at 7247-48, para. 3; *InnoCaption Certification Order*, 35 FCC Rcd at 14194-95, para. 3; *Clarity Certification Order*, 35 FCC Rcd at 5636, para. 2; *MachineGenius Certification Order*, 35 FCC Rcd at 4569, para. 2.

⁷⁵ 47 U.S.C. § 225(b)(1). Today, a wide variety of devices are capable of receiving and displaying captions of telephone conversations. Cf. *Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket Nos. 10-51 and 03-123, Further Notice of Proposed Rulemaking, 26 FCC Rcd 17367, 17380, para. 19 (2011) (noting that "commercial video technology can provide closer functional equivalence, may be less costly, and is likely to improve at a faster pace than the custom devices supplied exclusively by VRS providers").

⁷⁶ See *2007 IP CTS Declaratory Ruling*, 22 FCC Rcd at 390, para. 25 (establishing a funding policy for IP CTS to encourage nationwide competition that could "enhance consumer choice, service quality, and available features").

⁷⁷ Letter from John T. Nakahata, Counsel to Sorenson Communications, LLC, to Marlene H. Dortch, FCC, CG Docket Nos. 22-408, 03-123, and 13-24, at 2-3, Attach. 2 at 12-13 (filed Dec. 12, 2022) (*CaptionCall December 12, 2022 Ex Parte Letter*).

⁷⁸ *2017 VRS Compensation Order*, 32 FCC Rcd at 5901, para. 19.

⁷⁹ *Id.*; *2007 IP CTS Declaratory Ruling*, 22 FCC Rcd at 389, para. 24 (expecting IP CTS not to be under the control of one vendor or provider).

shelf equipment or that is used in association with web-based IP CTS as opposed to software that is used with a provider's or contractor's proprietary equipment. To the extent that such software costs are not directly attributable to one category or the other, we seek comment on how to allocate such costs between these categories.

C. Operating Margin

36. We propose that IP CTS compensation for the next cycle should aim to ensure that the total compensation paid to all providers allows an average recovery of an operating margin above allowable expenses that is within the zone of reasonableness (7.75%-12.35%) established in the Commission's *2017 VRS Compensation Order*⁸⁰ and applied to IP CTS in the *2020 IP CTS Compensation Order*.⁸¹ We seek comment on this proposal. Have there been changes in relevant factors that support adjusting the range? Is the current allowable operating margin sufficient to attract capital, new entry, and promote functionally equivalent IP CTS?⁸² What has been providers' experience since 2020?

37. Further, if we continue to use a cost-based methodology for IP CTS, should we also continue to set the operating margin at 10%, the approximate midpoint of the zone of reasonableness?⁸³ If we set different compensation formulas for CA-assisted IP CTS and ASR-only IP CTS, is there any reason to apply a different operating margin for the ASR-only formula?

D. Calculation of Cost-Based Compensation Formulas

38. We seek comment on the appropriate levels of per-minute compensation for CA-assisted and ASR-only IP CTS, respectively. Based on the cost and demand data reported by providers in March 2022, the TRS Fund administrator, Rolka Loube, has determined that the average cost (including a 10% operating margin) of CA-assisted IP CTS was \$0.9979 per minute in 2021, and is projected to be \$1.1818 per minute in 2022.⁸⁴ The estimated average cost of ASR-only IP CTS was \$0.6977 per minute in 2021 and is projected to be \$0.7286 for 2022.⁸⁵ Updated cost data, which will include historical cost and demand for 2021 and 2022 and projected cost and demand for 2023 and 2024, is due to be filed by providers in February 2023. In setting compensation, we intend to take account of such updated cost and demand data, which may result in modification of the above estimates.⁸⁶ The record will remain open for interested parties to comment on such additional data.

39. We recognize that the use of ASR-only IP CTS has grown while the use of CA-assisted IP CTS has declined.⁸⁷ As noted above, by the end of 2021, the ASR-only mode accounted for approximately 23% of monthly IP CTS minutes, and current projections are that the percentage will rise to 40% by late 2023.⁸⁸ If ASR-only minutes continue to increase as a share of total IP CTS usage, it

⁸⁰ *2017 VRS Compensation Order*, 32 FCC Rcd at 5904-05, para. 26.

⁸¹ *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10880, para. 28.

⁸² We note that a new investor recently purchased a controlling interest in a certified IP CTS provider, CaptionCall. See *Grant of Conditional Certification for CaptionCall, LLC to Provide Internet Protocol Captioned Telephone Service After Its Acquisition by Ariel GP Holdco, LLC*, CG Docket No. 03-123, Public Notice, DA 22-311 (CGB Mar. 23, 2022).

⁸³ *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10880-81, para. 29.

⁸⁴ 2022 TRS Compensation Report, Exh. 1-3.a.

⁸⁵ *Id.*, Exh. 1-3.b.

⁸⁶ For example, a recent report by Rolka Loube indicates that demand for IP CTS, which increased significantly in 2020 and 2021, appears to be returning to a level closer to that of 2019. This may reflect a declining impact of the COVID-19 pandemic. See CaptionCall December 12, 2022 *Ex Parte* Letter, Attach. 1 at 7 (citing Rolka Loube, *Health of the Fund* (2022)).

⁸⁷ IP CTS Demand Data (redacted version).

appears likely that the per-minute costs of ASR-only will decline, as ASR-only IP CTS seems to involve few costs that grow in direct proportion to usage.⁸⁹ We seek comment on these assumptions. Is the projected growth of ASR-only IP CTS a reasonable expectation, given the efficiency advantages and other benefits of this technology? Is the trend of growth likely to change substantially, and if so, how should that affect our compensation determinations?

E. Compensation Period

40. *Compensation Period.* We propose a three-year compensation period. Thus, if the revised compensation formula is effective July 1, 2023, the compensation period will end June 30, 2026. We believe this period is long enough to give providers certainty regarding the applicable compensation levels, provide incentives for providers to become more efficient, and mitigate any risk of creating the “rolling average” problem previously identified by the Commission regarding TRS.⁹⁰ On the other hand, the period is short enough to allow timely reassessment of the compensation formulas in response to substantial cost changes and other significant developments.⁹¹

41. We seek comment on this proposal. What are the costs and benefits of adopting a compensation period of a longer or shorter duration? In light of the high growth rate of ASR-only usage and the apparently high volume sensitivity of ASR-only per-minute costs, as discussed above, as well as the ongoing changes in ASR technology,⁹² should we set a different compensation period for an ASR-only compensation formula (or for a single IP CTS compensation formula, if we continue using one)?

F. Inflation and Productivity Adjustments

42. *Price Indexing Adjustments.* We seek comment to refresh the record on whether a price indexing formula, analogous to price-cap factors, should be applied during a multi-year compensation period, and on the appropriate indices to use to reflect inflation and productivity. If inflation and productivity trends for IP CTS can be predicted with reasonable accuracy, then it appears that the adoption of such factors would (1) give providers greater assurance of cost recovery during a multi-year compensation period, and (2) allow the benefits of any productivity-related cost declines to be shared with TRS Fund contributors.⁹³

43. In the *2020 IP CTS Compensation Order*, the Commission deferred consideration of such factors “until we are better able to assess the impact of ASR technology on IP CTS costs.”⁹⁴ Have providers adjusted their projected costs to account for anticipated inflation? If we continue to use a weighted average of historical and projected costs in setting a compensation formula, are such adjustments accounted for in the compensation formula? If adopted, how should a price-indexing

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⁸⁸ *Id.*

⁸⁹ Given the absence of CAs, it appears that ASR-only service involves a much smaller proportion of variable costs.

⁹⁰ See *Telecommunications Services for Individuals with Hearing and Speech Disabilities, and the Americans with Disabilities Act of 1990*, CC Docket No. 90-571, 8 FCC Rcd 1802, 1806, para. 25 (1993) (noting that setting compensation levels based on averaged provider costs, if recalculated every year, could leave some providers without adequate compensation, even if they are reasonably efficient); *2022 IP Relay Compensation Order* at 15, para. 37.

⁹¹ See *2017 VRS Compensation Order*, 32 FCC Rcd at 5921-22, para. 58; see also *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10883-84, para. 33; *2022 IP Relay Compensation Order* at 15, para. 37.

⁹² See Letter from John T. Nakahata, Counsel to Sorenson Communications, LLC, to Marlene H. Dortch, FCC, CG Docket Nos. 22-408, 03-123, and 13-24, at 2 (filed Dec. 8, 2022); CaptionCall December 12, 2022 *Ex Parte* Letter at 2 & Attach. 2 at 8.

⁹³ See *2017 VRS Compensation Order*, 32 FCC Rcd at 2477-78, para. 103.

⁹⁴ *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10886, para. 38.

approach be structured if the Commission were to adopt compensation levels for CA-assisted and ASR-only IP CTS, e.g., to account for any disparities in expected productivity gains between the services?

44. As a reference point for determining an annual inflation adjustment, we propose to use the Bureau of Labor Statistics' Employment Cost Index for "professional, scientific, and technical services."⁹⁵ We believe that, because CA-assisted IP CTS is a labor-intensive service, this seasonally adjusted index, which includes translation and interpreting services, will more accurately reflect changes in relevant costs than will a more general index of price changes.⁹⁶ We seek comment on this proposal. Is the use of the index appropriate for ASR-only IP CTS, given that ASR-only IP CTS is not primarily labor based? Would another index be more appropriate for ASR-only IP CTS?

45. *Productivity adjustment.* How should we ensure productivity is properly accounted for in the adjustment? Does the proposed price index appropriately account for inflation and productivity relevant to IP CTS or would a different price index be more reasonable? Should we adopt a separate X-factor to account for productivity or other factors that may reduce costs relative to inflation? If so, how should we set such an X-factor? For example, could total factor productivity for the professional and technical services industry as measured by the Bureau of Labor Statistics be used to set the X-factor for CA-assisted IP CTS?⁹⁷ Given that ASR-only IP CTS is not primarily labor based, would another index be more appropriate for ASR-only IP CTS?

G. Alternative Approaches

46. We also seek comment on whether there are other approaches to IP CTS compensation that can successfully align the compensation formula for this service with actual provider costs and enable the Commission to provide IP CTS in the most efficient manner. To the extent that commenters wish to suggest alternative approaches that could simplify or otherwise improve the IP CTS compensation process, we invite the submission of specific proposals, along with an explanation of how each proposal would better align IP CTS compensation with actual provider costs and otherwise advance the objectives of section 225.

H. Technical Amendment Clarifying IP Relay Compensation Rule

47. We propose a technical amendment to section 64.640(d) of the Commission rules to clarify the inflation adjustment factor for IP Relay compensation. In the *2022 IP Relay Compensation Order*, the Commission adopted an annual inflation adjustment factor based on the Employment Cost Index compiled by the Bureau of Labor Statistics, U.S. Department of Labor, for total compensation for private industry workers in professional, scientific, and technical services.⁹⁸ The Commission directed the TRS Fund administrator to specify in its annual TRS Fund report "the index values for each quarter of the previous calendar year and the last quarter of the year before that."⁹⁹ The Commission also directed the TRS Fund administrator to propose the IP Relay compensation level for the next TRS Fund year by adjusting the compensation level from the previous year by a percentage equal to the percentage change in the index between the fourth quarter of the calendar year ending before the filing of its annual report and the fourth quarter of the preceding calendar year.¹⁰⁰

⁹⁵ Bureau of Labor and Statistic, BLS Data Viewer, Employment Cost Index, <https://beta.bls.gov/dataViewer/view/timeseries/CIS20154000000001>.

⁹⁶ See *2022 IP Relay Compensation Order* at 16, para. 41.

⁹⁷ Bureau of Labor and Statistics, Economic New Release, Multifactor Trends in Manufacturing, <https://www.bls.gov/news.release/prod5.t01.htm> (Table 1. Total factor productivity and related data, 2020).

⁹⁸ *2022 IP Relay Compensation Order*, at 16, para. 41.

⁹⁹ *Id.* at 17, para. 43.

¹⁰⁰ *Id.*

48. In short, Section 64.640(d) codifies the index and time periods to be used to calculate the percentage change in the index to determine the rate of inflation. We propose to revise the text of the rule to clarify the inflation adjustment factor to eliminate any ambiguity as to how the inflation adjustment factor is calculated. The relevant provision of the rules currently reads:

(d) The inflation adjustment factor for a Fund Year (IF_{FY}), to be determined annually on or before June 30, is 1/100 times the difference between the values of the Employment Cost Index compiled by the Bureau of Labor Statistics, U.S. Department of Labor, for total compensation for private industry workers in professional, scientific, and technical services, for the following periods:

- (1) The fourth quarter of the Calendar Year ending 6 months before the beginning of the Fund Year; and
- (2) The fourth quarter of the preceding Calendar Year.

As amended, this provision would read:

(d) The inflation adjustment factor for a Fund Year (IF_{FY}), to be determined annually on or before June 30, is equal to the difference between the Initial Value and the Final Value, as defined herein, divided by the Initial Value. The Initial Value and Final Value, respectively, are the values of the Employment Cost Index compiled by the Bureau of Labor Statistics, U.S. Department of Labor, for total compensation for private industry workers in professional, scientific, and technical services, for the following periods:

- (1) Final Value. The fourth quarter of the Calendar Year ending 6 months before the beginning of the Fund Year; and
- (2) Initial Value. The fourth quarter of the preceding Calendar Year.

I. Digital Equity and Inclusion

49. Finally, the Commission, as part of its continuing effort to advance digital equity for all,¹⁰¹ including people of color, persons with disabilities, persons who live in rural or Tribal areas, and others who are or have been historically underserved, marginalized, or adversely affected by persistent poverty or inequality, invites comment on any equity-related considerations¹⁰² and benefits (if any) that may be associated with the proposals and issues discussed in this Notice. Specifically, we seek comment on how our proposals may promote or inhibit advances in diversity, equity, inclusion, and accessibility, as well the scope of the Commission's relevant legal authority.

¹⁰¹ Section 1 of the Act provides that the Commission “regulat[es] interstate and foreign commerce in communication by wire and radio so as to make [such service] available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex.” 47 U.S.C. § 151.

¹⁰² The term “equity” is used here consistent with Executive Order 13985 as the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. *See* Exec. Order No. 13985, 86 Fed. Reg. 7009, Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (Jan. 20, 2021).

IV. ORDER ON RECONSIDERATION

A. T-Mobile Petition and Joint Providers Request to Freeze Compensation

50. We deny T-Mobile's petition for reconsideration of the Commission's decision in the *2020 IP CTS Compensation Order* to adopt an average-cost methodology for IP CTS and to set per-minute compensation levels of \$1.42 and \$1.30 for TRS Fund Years 2020-21 and 2021-22, respectively.¹⁰³ For similar reasons, we also deny the related request of six IP CTS providers, in a May 2021 *ex parte* letter, to reverse the \$1.30 formula previously set for 2021-22, and instead to freeze in place the \$1.42 formula adopted for the 2020-21 Fund Year, thereby continuing that higher compensation level for a second year.¹⁰⁴

51. The T-Mobile petition does not identify any reason warranting reconsideration.¹⁰⁵ The Commission provided a reasoned explanation for both its decision to set a single compensation level based on average cost and its rejection of the tiered structure alternative advocated by some IP CTS providers.¹⁰⁶ While T-Mobile claims that the Commission continued using its average cost methodology due to inertia and administrative convenience,¹⁰⁷ the Commission cited numerous reasons for retaining the methodology, including that it (1) relies on reasonably reliable and consistent cost data, which is subject to audit,¹⁰⁸ (2) provides substantial incentives and opportunities for individual TRS providers to increase their efficiency and capture the resulting profits, and (3) provides a measure of transitional stability at a time of technological change.¹⁰⁹ Although T-Mobile disputes whether providers could actually increase their efficiency,¹¹⁰ the Commission reasonably concluded that the record indicated such improvements were likely, especially with the introduction of fully automatic IP CTS.¹¹¹

52. T-Mobile also argues that the Commission inappropriately rejected a "superior alternative," i.e., adoption of a tiered compensation structure.¹¹² T-Mobile points to nothing in the record to support its claim that a tiered structure would be "superior," other than the fact that several providers believed so.¹¹³ In any event, the Commission fully addressed this question in the *2020 IP CTS Compensation Order*, providing a detailed explanation for its finding that tiered compensation levels are

¹⁰³ See T-Mobile Petition.

¹⁰⁴ See Joint Providers May 25 Letter.

¹⁰⁵ 47 CFR § 1.429(i) (the Commission may deny or dismiss petitions for reconsideration).

¹⁰⁶ See *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10871-73, 10888-89, paras. 13-16, 43-47.

¹⁰⁷ T-Mobile Petition at 4 ("The FCC's justification for rejecting [a tiered approach] essentially is 'we've always had a single rate' and 'it's easier to do it that way.'").

¹⁰⁸ *2020 IP CTS Compensation Order*, 35 FCC Rcd at 108772, para. 14 ("Although any ratemaking method is subject to imprecision, provider cost data, which is subject to audit, has been reasonably reliable and consistent.").

¹⁰⁹ *Id.* at 108771-73, para. 14-16.

¹¹⁰ T-Mobile Petition at 4-5.

¹¹¹ See *2020 IP CTS Compensation Order*, 35 FCC Rcd at 108772, para. 15. T-Mobile argues that average cost compensation would force providers to degrade service "by moving to ASR technology before this newer technology achieves the same quality levels as current IP CTS offerings." T-Mobile Petition at 5. However, the Commission found that, based on then-current testing, ASR-only IP CTS *already* could "deliver captions far more quickly than IP CTS provided with communications assistants, and with comparable or greater accuracy." *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10888, para. 42. More recent testing buttresses that assessment. See *InnoCaption Certification Order*, 35 FCC Rcd at 14198-99, paras. 10-13; *ClearCaptions Certification Order*, 36 FCC Rcd at 7250-52, paras. 8-11; *CaptionCall Certification Order* at 4-6, paras. 9-11; *Hamilton Certification Order* at 4-5, paras. 9-11.

¹¹² T-Mobile Petition at 4.

¹¹³ *Id.*

not appropriate for IP CTS.¹¹⁴ T-Mobile offers no arguments not previously considered as to why the Commission should have reached a different result.¹¹⁵

53. Third, T-Mobile argues that the Commission failed to “account for the significant expenses and uncertainty associated with the ongoing COVID-19 pandemic.”¹¹⁶ To the contrary, the Commission made significant efforts to ensure that the impact of the pandemic was appropriately considered in the IP CTS compensation decision. As the Commission explained:

To provide an opportunity to determine the impact of these developments on per-minute provider costs before the Commission set a new IP CTS compensation rate, the Bureau extended the expiration date of the current compensation rate and directed the TRS Fund administrator to request additional cost and demand data for January to June 2020 from CA-assisted IP CTS providers and file an update to the IP CTS data contained in the 2020 TRS Rate Report.¹¹⁷

Based on the additional data reported by the providers, the TRS Fund administrator found that “increased expenditures during the pandemic have been offset by increased call volumes, resulting in no net increase in per-minute costs for the reporting providers, as a group or even individually.”¹¹⁸ In fact, the administrator reported that per-minute costs were *lower* due to increased demand during the pandemic.¹¹⁹ Recognizing that the lower per-minute costs might not persist, the Commission set compensation in a conservative fashion, based on the *higher* pre-pandemic cost estimates. T-Mobile argues that reliance on the TRS Fund administrator’s report was misplaced, because it addressed only the initial months of the pandemic and did not reflect additional costs allegedly incurred later on.¹²⁰ However, neither the rulemaking record nor T-Mobile’s petition for reconsideration includes any actual estimates of such allegedly unconsidered costs.¹²¹ Indeed, subsequent provider reports indicate substantial *declines* in per-minute costs for the period in question.¹²²

54. Finally, contrary to T-Mobile’s contention,¹²³ the Commission provided a reasonable explanation of its decision to continue setting a uniform compensation level for IP CTS, applicable to both the CA-assisted and ASR-only service modes. As the Commission explained, absent sufficient

¹¹⁴ See *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10888-89, paras. 43-47.

¹¹⁵ In this regard, we note that courts are particularly deferential in reviewing ratemaking orders because agency ratemaking is far from an exact science and involves policy determinations in which the agency is acknowledged to have expertise. See *Sorenson Communications v. FCC*, 897 F.3d 214, 223 (D.C. Cir. 2018).

¹¹⁶ T-Mobile Petition at 6-7.

¹¹⁷ *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10882-83, para. 32.

¹¹⁸ *Id.* (citing Rolka Loube, Memorandum on the Impact of Covid-19 on IP CTS Provider Costs and Demand, CG Docket Nos. 03-123 and 13-24 (filed Sept. 8, 2020)).

¹¹⁹ *Id.*

¹²⁰ T-Mobile Petition at 6-7.

¹²¹ *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10882-83, para. 32 (acknowledging “Sprint’s and Hamilton’s latest cost claims” but noting they “are not borne out by the providers’ own updated cost data and projections for 2020 and 2021, which were specifically requested *in order to assess likely provider cost changes.*”) (emphasis in original).

¹²² See, e.g., 2022 TRS Compensation Report, Exh. 1-3 (showing that average per-minute costs (including a 10% operating margin) declined from \$1.2302 in 2019 to \$1.0352 in 2020 and \$0.9593 in 2021).

¹²³ T-Mobile Petition at 7-9 (claiming that the Commission gave providers of ASR-only service “an enormous unearned subsidy”).

information to assess the costs of the new ASR-only service mode, it would have been arbitrary to attempt to devise a separate compensation formula for ASR-only IP CTS, and also would have run the risk of creating an inappropriate disincentive for adoption of this promising technology.¹²⁴ In addition, the Commission reasonably relied on evidence that, to the extent that a single compensation formula encouraged IP CTS providers to increase their use of ASR-only captioning, the result would be an improvement in service quality.¹²⁵

55. We also deny the request of the Joint Providers to maintain the IP CTS compensation level at \$1.42 per minute for the 2021-22 TRS Fund year.¹²⁶ The Joint Providers request is essentially a late-filed petition for reconsideration of the *2020 IP CTS Compensation Order*, which established a lower compensation level, \$1.30 per minute, for that period.¹²⁷ In any event, we find no merit in the Joint Providers' arguments. Like T-Mobile, the Joint Providers argue that a compensation freeze is needed to protect service quality and that the COVID-19 pandemic has introduced cost uncertainties for IP CTS providers.¹²⁸ However, as addressed above, the record established that the \$1.30 per minute rate afforded an opportunity for providers to recover their reasonable per-minute costs of providing IP CTS plus a reasonable operating margin.¹²⁹ In addition, the uncertainties introduced by the pandemic and its effect on provider costs were already effectively considered, addressed, and factored into the compensation plan adopted in the *2020 IP CTS Compensation Order*.¹³⁰

56. Accordingly, we deny the petition of T-Mobile for reconsideration and the request of the Joint Providers for a freeze of the \$1.42 per minute compensation level.

B. IDT Petition

57. We also deny IDT's petition for reconsideration of the Commission's *2020 IP CTS Compensation Order*. IDT argues that, when the Commission adopted a mid-year reduction in the IP CTS compensation formula for the 2020-21 TRS Fund Year (reducing the compensation level from \$1.58 to \$1.42 per minute),¹³¹ the Commission also should have made a mid-year reduction in the applicable TRS Fund contribution factor.¹³² However, the Commission's rules already address such circumstances by detailing a process to address the collection of excess funding for a TRS Fund Year, by applying the excess against the funding requirement for the *following* year.¹³³ In accordance with this rule, in June 2021 the Commission took account of the surplus in the TRS Fund when determining the contribution requirement and contribution factor for the 2021-22 TRS Fund Year.¹³⁴ The lower contribution

¹²⁴ *2020 IP CTS Compensation Order*, 35 FCC Rcd at 10888, para. 41.

¹²⁵ *Id.* at 10888, para. 42 (explaining that recent testing indicated that "fully automatic IP CTS can deliver captions far more quickly than IP CTS provided with communications assistants, and with comparable or greater accuracy").

¹²⁶ *See* Joint Providers May 25 Letter.

¹²⁷ *See* 47 CFR § 1.429(d).

¹²⁸ Joint Providers May 25 Letter at 1-4.

¹²⁹ *See 2020 IP CTS Compensation Order*, 35 FCC Rcd at 10871-73, 10882, paras. 14-16, 30; *see also id.* at 10891, n.151 (detailing that because the \$1.30 is based on the average cost of providing CA-assisted IP CTS, an efficient provider will continue to be able to recover its reasonable costs plus a reasonable operating margin).

¹³⁰ *See id.* at 10882-83, para. 32.

¹³¹ *Id.* at 10885-86, paras. 35-37.

¹³² IDT Petition at 2-3.

¹³³ *See* 47 CFR § 64.604(c)(5)(iii)(B).

¹³⁴ *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Structure and Practices of the Video Relay Service Program*, CG Docket Nos. 03-123 and 10-51, Order, 36 FCC Rcd 10194, 10200, 10202, paras. 16, 21 (CGB 2021) (reducing the funding requirement for the TRS Fund by subtracting the projected surplus from the previous Fund year).

requirement for 2021-22 thus offset, for all TRS Fund contributors, the excess funding provided in the previous year. Because the contributors already received the benefit of the excess being applied to the funding requirement for the following year, no further action is warranted. Accordingly, we deny IDT's petition as moot.

V. PROCEDURAL MATTERS

58. *Congressional Review Act.* The Commission will not send a copy of the Order on Reconsideration to Congress and the Government Accountability Office pursuant to the Congressional Review Act (CRA),¹³⁵ because it does not adopt any rule as defined in the CRA.¹³⁶

59. *Initial Regulatory Flexibility Analysis.* As required by the Regulatory Flexibility Act (RFA), the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules addressed in this document.¹³⁷ The IRFA is set forth in the Appendix. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Notice. The Commission will send a copy of the Notice, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.¹³⁸ In addition, the Notice and IRFA (or summaries thereof) will be published in the *Federal Register*.¹³⁹

60. *Paperwork Reduction Act Analysis.* The Notice seeks comment on proposed rule amendments that may result in new or modified information collection requirements. If the Commission adopts any new or modified information collection requirements, the Commission will publish another notice in the *Federal Register* inviting the public to comment on the requirements, as required by the PRA.¹⁴⁰ In addition, pursuant to the Small Business Paperwork Relief Act of 2002, we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.¹⁴¹

61. *Comments.* Pursuant to sections 1.415 and 1.419 of the Commission's rules, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document.¹⁴² Comments may be filed using the Commission's Electronic Comment Filing System (ECFS).¹⁴³

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <https://www.fcc.gov/ecfs/filings>.
- Paper Filers:
 - Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

¹³⁵ See 5 U.S.C. § 801(a)(1)(A).

¹³⁶ *Id.* § 804(3).

¹³⁷ Pub. L. No. 96-354, 94 Stat 1164 (1980) (codified at 5 U.S.C. §§601-612).

¹³⁸ See 5 U.S.C. § 603(a).

¹³⁹ *Id.*

¹⁴⁰ 44 U.S.C. §§ 3501-3520.

¹⁴¹ *Id.* § 3506(c)(4).

¹⁴² 47 CFR §§ 1.415, 1.419

¹⁴³ See FCC, Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24121 (May 1, 1998).

- Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.
- All hand-delivered or messenger-delivered paper filings for the Commission’s Secretary must be delivered to Secretary’s Office at 9050 Junction Drive, Annapolis Junction, MD 20701. The filing hours are 8:00 a.m. to 4:00 p.m., Monday through Friday. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
- Currently, the Commission does not accept any hand delivered or messenger delivered filings as a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. In the event that the Commission announces the lifting of COVID-19 restrictions, a filing window will be opened at the Commission’s office located at 9050 Junction Drive, Annapolis Junction, Maryland 20701.¹⁴⁴
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- U.S. Postal Service first-class, Express, and Priority mail may be addressed to Federal Communications Commission, 45 L Street NE, Washington, DC 20554.
- During the time the Commission’s building is closed to the general public and until further notice, if more than one docket or rulemaking number appears in the caption of a proceeding, paper filers need not submit two additional copies for each additional docket or rulemaking number; an original and one copy are sufficient.

62. *Ex Parte Rules.* The proceeding this Notice initiates shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.¹⁴⁵ Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with section 1.1206(b). In proceedings governed by section 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission’s *ex parte* rules.

¹⁴⁴ See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, 35 FCC Rcd 2788 (OMD 2020), <https://www.fcc.gov/document/fcc-closesheadquarters-open-window-and-changes-hand-delivery-policy>.

¹⁴⁵ 47 CFR § 1.1200 *et seq.*

63. *People with Disabilities*: To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at 202-418-0530.

VI. ORDERING CLAUSES

64. Accordingly, IT IS ORDERED that, pursuant to sections 1, 2, (4)(i), (4)(j), and 225 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i), 154(j), 225, and sections 1.429 and 64.604(c)(5)(iii)(E) of the Commission's rules, 47 CFR §§ 1.429, 64.604(c)(5)(iii)(E), the foregoing Notice of Proposed Rulemaking and Order on Reconsideration ARE ADOPTED.

65. IT IS FURTHER ORDERED that T-Mobile's Petition for Reconsideration of the compensation formulas adopted in the *2020 Order* IS DENIED.

66. IT IS FURTHER ORDERED that the Joint Providers request to freeze compensation at the \$1.42 compensation level IS DENIED.

67. IT IS FURTHER ORDERED that IDT's Petition for Reconsideration of the contribution requirements adopted in the *2020 Order* IS DENIED AS MOOT.

68. IT IS FURTHER ORDERED that the Order on Reconsideration SHALL BE EFFECTIVE thirty days after publication in the Federal Register.

69. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of the Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

Proposed Rules

The Federal Communications Commission amends Title 47 of the Code of Federal Regulations as follows:

Part 64 - MISCELLANEOUS RULES RELATING TO COMMON CARRIERS

1. The authority citation for part 64 continues to read as follows:

Authority: 47 U.S.C. [to be completed prior to publication in the Federal Register], unless otherwise noted.

2. The authority citation for subpart F continues to read as follows:

Authority: 47 U.S.C. [to be completed prior to publication in the Federal Register], unless otherwise noted.

3. Amend § 64.640 by revising paragraph (d) to read as follows:

§ 64.640 Compensation for IP Relay.

* * * * *

(d) The inflation adjustment factor for a Fund Year (IF_{FY}), to be determined annually on or before June 30, is equal to the difference between the Initial Value and the Final Value, as defined herein, divided by the Initial Value. The Initial Value and Final Value, respectively, are the values of the Employment Cost Index compiled by the Bureau of Labor Statistics, U.S. Department of Labor, for total compensation for private industry workers in professional, scientific, and technical services, for the following periods:

- (1) Final Value. The fourth quarter of the Calendar Year ending 6 months before the beginning of the Fund Year; and
 (2) Initial Value. The fourth quarter of the preceding Calendar Year.

* * * * *

4. Amend subpart F by adding a new section 64.641 to read as follows:

§ 64.641 Compensation for Internet Protocol Captioned Telephone Service using only automatic speech recognition technology (ASR-Only IP CTS).

(a) For the period from _____, through _____, TRS Fund compensation for the provision of ASR-Only Internet Protocol Captioned Telephone Service shall be as described in this section.

(b) For Fund Year _____, comprising the period from _____, _____, the Compensation Level for ASR-Only Internet Protocol Captioned Telephone Service shall be \$X.XXXX per minute.

(c) For each succeeding Fund Year through _____, the per-minute Compensation Level (L_{FY}) shall be determined in accordance with the following equation:

$$L_{FY} = L_{FY-1} * (1 + IF_{FY} - PF_{FY})$$

where IF_{FY} is the Inflation Adjustment Factor for that Fund Year, determined in accordance with paragraph (d) of this section and PF_{FY} is the Productivity Adjustment Factor for that Fund Year, determined in accordance with paragraph (e).

(d) The inflation adjustment factor for a Fund Year (IF_{FY}), to be determined annually on or before June 30, is equal to the difference between the Initial Value and the Final Value, as defined herein, divided by the Initial Value. The Initial Value and Final Value, respectively, are the values of the Employment Cost

Index compiled by the Bureau of Labor Statistics, U.S. Department of Labor, for total compensation for private industry workers in professional, scientific, and technical services, for the following periods:

(1) Final Value. The fourth quarter of the Calendar Year ending 6 months before the beginning of the Fund Year; and

(2) Initial Value. The fourth quarter of the preceding Calendar Year.

(e) The productivity adjustment factor for a Fund Year (PF_{FY}), to be determined annually on or before June 30, is [to be added].

(f) In addition to L_{FY} , an ASR-only Internet Protocol Captioned Telephone Service provider shall be paid a per-minute exogenous cost adjustment if claims for exogenous cost recovery are submitted by the provider and approved by the Commission on or before June 30. Such exogenous cost adjustment shall equal the amount of such approved claims divided by the provider's projected minutes for the Fund Year.

(g) An exogenous cost adjustment shall be paid if an Internet Protocol Captioned Telephone Service provider incurs well-documented costs that:

(1) belong to a category of costs that the Commission has deemed allowable;

(2) result from new TRS requirements or other causes beyond the provider's control;

(3) are new costs that were not factored into the applicable compensation formula; and

(4) if unrecovered, would cause a provider's current allowable-expenses-plus-operating margin to exceed its revenues.

5. Amend subpart F by adding a new section 64.642 to read as follows:

§ 64.642 Compensation for Internet Protocol Captioned Telephone Service provided with communications assistants (CA-Assisted IP CTS).

(a) For the period from _____, through _____, TRS Fund compensation for the provision of CA-Assisted Internet Protocol Captioned Telephone Service shall be as described in this section.

(b) For Fund Year _____, comprising the period from _____, through _____, the Compensation Level for CA-Assisted Internet Protocol Captioned Telephone Service shall be \$X.XXXX per minute.

(c) For each succeeding Fund Year through _____, the per-minute Compensation Level (L_{FY}) shall be determined in accordance with the following equation:

$$L_{FY} = L_{FY-1} * (1 + IF_{FY} - PF_{FY})$$

where IF_{FY} is the Inflation Adjustment Factor for that Fund Year, determined in accordance with paragraph (d) of this section and PF_{FY} is the Productivity Adjustment Factor for that Fund Year, determined in accordance with paragraph (e).

(d) The inflation adjustment factor for a Fund Year (IF_{FY}), to be determined annually on or before June 30, is equal to the difference between the Initial Value and the Final Value, as defined herein, divided by the Initial Value. The Initial Value and Final Value, respectively, are the values of the Employment Cost Index compiled by the Bureau of Labor Statistics, U.S. Department of Labor, for total compensation for private industry workers in professional, scientific, and technical services, for the following periods:

(1) Final Value. The fourth quarter of the Calendar Year ending 6 months before the beginning of the Fund Year; and

(2) Initial Value. The fourth quarter of the preceding Calendar Year.

(e) The productivity adjustment factor for a Fund Year (PF_{FY}), to be determined annually on or before June 30, is [to be added].

(f) In addition to L_{FY} , a CA-assisted Internet Protocol Captioned Telephone Service provider shall be paid a per-minute exogenous cost adjustment if claims for exogenous cost recovery are submitted by the provider and approved by the Commission on or before June 30. Such exogenous cost adjustment shall equal the amount of such approved claims divided by the provider's projected minutes for the Fund Year.

(g) An exogenous cost adjustment shall be paid if a CA-assisted Internet Protocol Captioned Telephone Service provider incurs well-documented costs that:

- (1) belong to a category of costs that the Commission has deemed allowable;
- (2) result from new TRS requirements or other causes beyond the provider's control;
- (3) are new costs that were not factored into the applicable compensation formula; and
- (4) if unrecovered, would cause a provider's current allowable-expenses-plus-operating margin to exceed its revenues.

APPENDIX B**Initial Regulatory Flexibility Analysis**

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in the Notice of Proposed Rulemaking (NPRM). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadline for comments on the NPRM provided in the item. The Commission will send a copy of the entire NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).² In addition, the NPRM and the IRFA (or summaries thereof) will be published in the Federal Register.³

A. Need For, and Objectives of, the Proposed Rules

2. In the NPRM, the Commission seeks comment on the adoption of a compensation methodology and compensation levels for Telecommunications Relay Services (TRS) Fund support of providers of Internet Protocol Captioned Telephone Services (IP CTS). With the introduction and growing demand of a mode of IP CTS using only automatic speech recognition (ASR) technology (ASR-only IP CTS), the Commission seeks to build a record on the cost and service quality differences between ASR-only IP CTS and the mode of IP CTS that uses communications assistants (CAs) for call captioning (CA-assisted IP CTS). In doing so, the Commission proposes to move away from its current practice of determining a compensation level for both ASR-only IP CTS and CA-assisted IP CTS on the average weighted cost of providing CA-assisted IP CTS. To develop an alternative, the Commission seeks comment on the allocation of costs between ASR-only and CA-assisted IP CTS, allowable costs, operating margins, cost reporting, available demand data, and the service quality of ASR-only and CA-assisted IP CTS.⁴ The Commission also seeks comment on the appropriate duration of the compensation period and the use a price indexing formula to adjust compensation for inflation and productivity.⁵ The Commission also seeks comment on alternatives to using a cost-based compensation methodology and alternatives to averaging costs to determine whether such alternatives could better achieve the Commission's objectives.

3. The Commission also seeks comment on a technical amendment to the Commission's rules on IP Relay compensation to clarify the inflation adjustment factor that is applied annually during the compensation period.

4. The Commission takes these steps to ensure the provision of IP CTS in a functionally equivalent manner to persons who are deaf, hard of hearing, deafblind or have speech disabilities.⁶ In doing so, the Commission balances several different factors including regulating the recovery of costs caused by the service, encouraging the use of existing technology and not discouraging or impairing the development of improved technology, and ensuring IP CTS is "available, to the extent possible and in the most efficient manner."⁷

¹ See 5 U.S.C. § 603. The RFA, *see id.* §§ 601-612, was amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² See 5 U.S.C. § 603(a).

³ See *id.*

⁴ See NPRM paras. 13-37.

⁵ See NPRM paras. 38-44.

⁶ 47 U.S.C. § 225(a)(3); 47 CFR § 64.601(a)(42).

⁷ 47 U.S.C. § 225.

B. Legal Basis

5. The authority for this proposed rulemaking is contained in sections 1, 2, and 225 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 225.

C. Description and Estimate of the Number of Small Entities Impacted

6. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the proposed rules and policies, if adopted.⁸ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”⁹ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.¹⁰ A “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.¹¹

7. The proposals in the NPRM will affect the obligations of IP CTS providers. These services can be included within the broad economic category of All Other Telecommunications.

8. *All Other Telecommunications.* This industry is comprised of establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation.¹² This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems.¹³ Providers of Internet services (e.g. dial-up ISPs) or voice over Internet protocol (VoIP) services, via client-supplied telecommunications connections are also included in this industry.¹⁴ The SBA small business size standard for this industry classifies firms with annual receipts of \$35 million or less as small.¹⁵ U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year.¹⁶ Of those firms, 1,039 had revenue of less than \$25 million, and 15 firms had annual receipts of \$25 million to \$49, 999,999.¹⁷ Based on this data, the Commission estimates that the majority of “All Other Telecommunications” firms can be considered small.

⁸ 5 U.S.C. § 603(b)(3).

⁹ *Id.* § 601(6).

¹⁰ *Id.* § 601(3) (incorporating by reference the definition of “small-business concern” in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.”

¹¹ 15 U.S.C. § 632.

¹² See U.S. Census Bureau, *2017 NAICS Definition, “517919 All Other Telecommunications,”* <https://www.census.gov/naics/?input=517919&year=2017&details=517919>.

¹³ *Id.*

¹⁴ *Id.*

¹⁵ See 13 CFR § 121.201, NAICS Code 517919.

¹⁶ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEREVFIRM, NAICS Code 517919, <https://data.census.gov/cedsci/table?y=2017&n=517919&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>.

¹⁷ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

9. The proposed compensation methodology will not create new reporting, recordkeeping, or other compliance requirements.

E. Steps Taken to Minimize Significant Impact on Small Entities, and Significant Alternatives Considered

10. The RFA requires an agency to provide, “a description of the steps the agency has taken to minimize the significant economic impact on small entities . . . including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.”¹⁸ Such alternatives may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.¹⁹

11. Throughout the NPRM, the Commission is (1) taking steps to minimize the impact on small entities by seeking comment on reforms to the IP CTS compensation methodology that would ensure that providers of IP CTS, are fairly compensated for the provision of IP CTS (both ASR-only IP CTS and CA-assisted IP CTS) including considering significant alternatives by identifying and seeking comment on multiple methodologies for compensation; and (2) considering various options to determine the best compensation methodology for ensuring functionally equivalent service and balance several different factors in carrying out the objective of section 225 over the long term in accordance with the Commission’s statutory obligations. The NPRM seeks comment on the effect these proposals will have on all entities that have the potential to provide IP CTS, including small entities.

12. The NPRM seeks comment from all interested parties. Small entities are encouraged to bring to the Commission’s attention any specific concerns they may have with the proposals outlined in the NPRM. The Commission expects to consider the economic impact on small entities, as identified in comments filed in response to the NPRM, in reaching its final conclusions and acting in this proceeding.

F. Federal Rules Which Duplicate, Overlap, or Conflict With, the Commission’s Proposals

13. None.

¹⁸ 5 U.S.C. § 604(a)(6).

¹⁹ *Id.* § 603(b).

**STATEMENT OF
CHAIRWOMAN JESSICA ROSENWORCEL**

Re: *Internet Protocol Captioned Telephone Service Compensation*, CG Docket No. 22-408; *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket No. 03-123; *Misuse of Internet Protocol (IP) Captioned Telephone Service*, CG Docket No. 13-24, Notice of Proposed Rulemaking and Order on Reconsideration (December 21, 2022)

At the heart of our responsibilities under the Americans with Disabilities Act lies the concept of functional equivalency. Though it sounds like language only a lawyer could love, for millions of adults with hearing loss, functional equivalency matters. It means they can pick up the phone and seek emergency help, work with colleagues, make a doctor's appointment, follow up with a child's teacher, and connect with family and friends—just like their hearing counterparts.

At the Federal Communications Commission, we give meaning to functional equivalency by ensuring that there are services in the marketplace that assist those with hearing loss use communications. Internet Protocol Captioned Telephone Service, or IP CTS, is one of those services. It allows those with some residual hearing to use their own voice to speak during a call but then read captions on their device when the other participant in the call responds.

As technology has evolved, so has IP CTS. Some providers now use automated speech recognition to provide service instead of traditional IP CTS, which requires human intervention through communications assistants.

In the rulemaking we adopt today, we seek to reflect these changes in a way that honors functional equivalency. First, we recognize that as new technologies emerge we need to ensure that they meet basic service-quality standards and take note of our ongoing work to establish appropriate measures for both forms of IP CTS. Second, we propose to compensate providers differently, depending on when they are providing captions on a fully automated basis or providing them through the use of traditional communications assistants.

I look forward to the record that develops. I also look forward to continuing to support IP CTS in a way that acknowledges technological change and is also consistent with our duties under the Americans with Disabilities Act.

Thank you to those responsible for this effort, including Bob Aldrich, Diane Burstein, Edyael Casaperalta, Eliot Greenwald, Josh Mendelsohn, Ike Ofobike, Alejandro Roark, Michael Scott, Ross Slutsky, and Dana Warrick from the Consumer and Governmental Affairs Bureau; Cara Grayer from the Office of Communications Business Opportunities; Terry Cavanaugh, Richard Mallen, and William Richardson from the Office of General Counsel; Susan Lee, Kim Makuch, Michelle Schaefer, Emily Talaga, and Andrew Wise from the Office of Economics and Analytics; and Soumitra Das and Andrew Mulitz from the Office of the Managing Director.

**STATEMENT OF
COMMISSIONER GEOFFREY STARKS**

Re: *Internet Protocol Captioned Telephone Service Compensation*, CG Docket No. 22-408; *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket No. 03-123; *Misuse of Internet Protocol (IP) Captioned Telephone Service*, CG Docket No. 13-24, Notice of Proposed Rulemaking and Order on Reconsideration (December 21, 2022)

The FCC has twin obligations when it comes to telecommunications relay services (“TRS”). First, and most important, we are charged with ensuring that those who are deaf, hard of hearing, deafblind, or who have speech disabilities can communicate in a manner that is functionally equivalent to those without such disabilities. Second, we must be good stewards of the funds used to provide these services, and ensure that they are only used for this critical purpose.

Today’s action continues our important work of fulfilling our second obligation, by asking whether different rates should be applied to internet protocol captioned telephone service (“IP CTS”) when the service is provided by an individual communications assistant, as opposed to on a fully automated basis, by automated speech recognition (“ASR”). But asking these questions necessarily raises the issue of the functional equivalence of each of these options. In particular, I still remain concerned about potential algorithmic bias in ASR. As I first raised more than two years ago, studies have shown that speech recognition systems make far more errors when transcribing the speech of people of color than of their white counterparts.¹ I thank the Chairwoman for agreeing to my edits referencing this issue in today’s item.

Earlier this month, I was privileged to visit a video relay service (“VRS”) call center outside of Washington, D.C. Individuals who communicate using sign language use VRS—another form of TRS—every day to have the phone calls that many take for granted. One of the people I spoke to recalled how the technology opened doors for him, and enabled him to go after goals and dreams that had previously seemed out of reach. I often speak about the importance of ensuring that all Americans are connected in today’s technological world. This is no different. We must continue to improve and support all forms of TRS, including IP CTS and VRS, because unequal communications services should not stand in the way of anyone’s goals.

¹ See Allison Koenecke et al., “Racial disparities in automated speech recognition,” Proceedings of the National Academy of Sciences Vol. 117 No. 14 (2020), <https://www.pnas.org/doi/10.1073/pnas.1915768117> (Stanford University study of “state-of-the-art ASR systems” developed by five major tech companies and finding an average word error rate of 35% for black speakers compared to 19% for white speakers).